

K070107

**PARI Hydrate G  
510(k) Submission  
510(k) Summary**

FEB 23 2007

**Submitter Information**

Name: PARI Innovative Manufacturers, Inc.  
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Midlothian, VA 23112  
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Fax Number: 804-639-7244  
Contact Name: Michael Judge  
Date Prepared: November 14, 2006

**Device Name**

Common Name: Humidifier  
Proprietary Name: PARI Hydrate G  
Classification Name: Humidifier, Respiratory Gas (Direct Patient Interface),  
21 CFR 868.5450, Product Code BTT

**Legally Marketed Predicate Device(s)**

| <b>Manufacturer</b>      | <b>Device</b>         | <b>510(k) Number</b> |
|--------------------------|-----------------------|----------------------|
| VapoTherm, Inc.          | Model 2000i           | K042245              |
| Smiths Medical ASD, Inc. | AquinOx, model P50000 | K050314              |

**Device Description**

The Hydrate G is a Respiratory Gas Humidifier which provides heated evaporated water content to dry breathing gases using Capillary Force Vaporization technology. A nasal cannula is used to deliver the heated and humidified gas to the patient.

**Indications For Use**

The PARI Hydrate G is designed to warm and add moisture to breathing gases for administration to infant, pediatric, and adult patients. The Hydrate G is intended for use in homes, hospitals, and sub-acute institutions.

**Technological Characteristics Compared to Predicate Device**

PARI Hydrate G, AquinOx P50000 and VapoTherm 2000i are all Active High Flow Gas Humidification systems, used to add moisture and warmth to breathing gases for administration to patients.

PARI Hydrate G employs similar materials, similar air, water, and power inputs, and delivers similar outputs compared to the predicate devices. The Capillary Force Vaporization technology, although slightly different than the heated plate and vapor/membrane transpiration concepts used by the predicates, uses a heater to draw liquid through a porous medium resulting in comparable humidification output to the predicate devices.

**Non-Clinical Test Summary**

PARI Hydrate G was tested to compare performance to the predicate devices and ISO 8185, using a gravimetric test standard for humidifier output across the range of flows. The output of the subject device is comparable to the predicates.

**Clinical Performance Summary**

Clinical testing was not completed/is not required to show substantial equivalence.

**Conclusions from Testing**

PARI Hydrate G meets performance requirements and raises no new issues of safety or effectiveness.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

PARI Innovative Manufactures, Incorporated  
C/O Mr. Neil E. Devine  
Responsible Third Party Official  
Intertek Testing Services  
2307 East Aurora Road  
Twinsburg, Ohio 44087

FEB 23 2007

Re: K070107

Trade/Device Name: PARI Hydrate G  
Regulation Number: 21 CFR 868.5450  
Regulation Name: Respiratory Gas Humidifier  
Regulatory Class: II  
Product Code: BTT  
Dated: February 20, 2007  
Received: February 21, 2007

Dear Mr. Devine:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

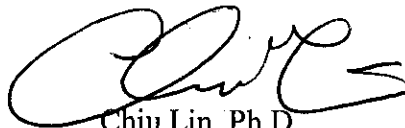
If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,



Chiu Lin, Ph.D.

Director

Division of Anesthesiology, General Hospital,

Infection Control and Dental Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): N/A

Device Name: PARI Hydrate G

### Indications for Use:

The PARI Hydrate G is designed to warm and add moisture to breathing gases for administration to infant, pediatric, and adult patients. The Hydrate G is intended for use in homes, hospitals, and sub-acute institutions.

Prescription Use XXX  
(Part 21 CFR 801 Subpart D)

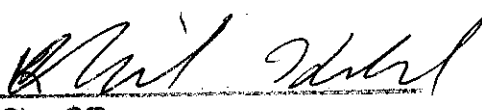
AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

  
(Division Sign-Off)  
Division of Anesthesiology, General Hospital,  
Infection Control, Dental Devices

510(k) Number: K070107

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(Posted November 13, 2003)